

What Is Claimed Is:

1. A flat lamp for emitting light to a surface area, comprising:
  - a planar cover formed of a transparent material;
  - an anode formed on a rear surface of the planar cover, the rear surface of the planar cover coated with a fluorescent material;
  - a bottom coupled with the rear surface of the cover to form a sealed inner space between the bottom and the rear surface of the cover;
  - a cathode formed on a surface of the bottom internal to the sealed inner space;
  - power supply means electrically connected to the anode and the cathode to supply an external power source; and
  - a plasma-discharging gas injected into the sealed inner space, wherein visible light is produced uniformly over an entire surface of the cover by a reaction between the plasma-discharging gas and an electric field generated between the cathode and the anode.
2. The flat lamp according to Claim 1, wherein the anode is a transparent electrode.
3. The flat lamp according to Claim 1, wherein the anode has a lattice shape including electrically conductive orthogonal horizontal lines and vertical lines.
4. The flat lamp according to Claim 1, wherein the cathode includes a film

disposed upon the surface of the bottom internal to the sealed inner space.

5. The flat lamp according to Claim 1, wherein edges of the surface of the bottom internal to the sealed inner space is a curved surface for increasing electrode density.

6. The flat lamp according to Claim 1, wherein a sealable gas inlet is formed at one side of a junction surface between the bottom and the cover.

7. The flat lamp according to Claim 1, wherein the power supply means includes a connector electrically connected to the external power source, and a pair of flexible printed circuit substrates electrically connected between ends of the cathode and the anode and wires extending from the connector.

8. The flat lamp according to Claim 7, wherein one of the pair of flexible printed circuit substrates is electrically connected to one end of the cathode through a sealable gas inlet.

9. The flat lamp according to Claim 1, wherein the cover is at least made of one of glass and a heat-resistant resin.

10. The flat lamp according to Claim 1, wherein the bottom is formed of one of glass, a heat-resistant resin, a metal and an oxide.

11. The flat lamp according to Claim 1, wherein the cover has a rectangular shape and the bottom has a hexagonal shape of which an upper surface of the bottom is open except where a junction surface of the bottom is coupled with the cover.

12. The flat lamp according to claim 11, wherein short lateral sides of the bottom are curved in a lower surface direction to form a curved surface having a predetermined curvature ratio, and the short lateral sides and the lower surface of the bottom are coated with a film to form the cathode.

13. A liquid crystal display device, comprising:

a liquid crystal display panel;

a backlight assembly disposed at a rear surface of the liquid crystal display panel, including a rectangular planar cover disposed at the rear surface of the liquid crystal display panel, a bottom coupled with a circumferential portion of a rear surface of the cover to form a sealed inner space, an anode disposed on central portions of the rear surface of the cover internal to the sealed inner space, a cathode disposed on a surface of the bottom internal to the sealed inner space, power supply means electrically connected to the anode and the cathode to supply an external power source, and a plasma-discharging gas injected into the sealed inner space between the cover and the bottom.

14. The liquid crystal display according to Claim 13, wherein the rear surface of the cover includes a fluorescent material layer.

15. The liquid crystal display device according to Claim 14, wherein a display surface of the liquid crystal display panel is supplied with surface light having uniform brightness from a reaction between the plasma-discharging gas and the fluorescent material layer.

16. The liquid crystal display according to Claim 13, further comprising:

at least one diffusion sheet disposed between the liquid crystal display panel and the backlight assembly; and

at least one prism sheet disposed between the liquid crystal display panel and the backlight assembly.